U.S. DEPARTMENT OF COMMERCE	2. Award Or Grant Number
	50-50-M09004
Performance Progress Report	4. Report Date (MM/DD/YYYY)
	08-10-2010

1. Recipient Name	6. Designated Entity On Behalf Of:
Vermont Center for Geographic Information, Inc.	n/a

3. Street Address		8. Final Report?	9. Report Frequency
58 South Main Street, Suite 2,		◯ Yes	◉ Quarterly
		◉ No	◯ Semi Annual
5. City, State, Zip Code			◯ Annual
Waterbury, VT 05676			◯ Final

7. Project / Grant Period Start Date: (MM/DD/YYYY)	7a. End Date: (MM/DD/YYYY)	8. Reporting Period End Date: (MM/DD/YYYY)	9a. If Other, please describe:
10-01-2009	10-01-2011	06-30-2010	n/a

10. Broadband Mapping

10a. Provider Table

Number of Providers Identified	Number of Providers Contacted	Number of Agreements Reached for Data Sharing	Number of Partial Data Sets Received	Number of Complete Data Sets	Number of Data Sets Verified
36	36	5	0	35	35

10b. Are you submitting the required PROVIDER DATA by using the Excel spreadsheet provided by the SBDD grants office? ◉ Yes ◯ No

10c. Have you encountered challenges with any providers that indicate they may refuse to participate in this project? ◉ Yes ◯ No

10d. If so, describe the discussions to date with each of these providers and the current status

VT is actively requesting updates, changes and new coverage data (to be current as of 6/30/2010) from the Providers in our state. We have no comprehensive status to provide on where that effort stands at this time. The numbers above come from the March data submission to NTIA. However, there is no reason to believe that participation will change significantly from the high level of participation we saw for the March 31, delivery. We will continue to pursue updated data from the Providers in future months in preparation for the October 1, delivery.

10e. If you are collecting data through other means (e.g. data extraction, extrapolation, etc), please describe your progress to date and the relevant activities to be undertaken in the future

Yes, we are collecting information through other means. Data for newly located wireless tower and transceiver sites and other information is extracted from the required reporting data for VT Act 250 data. Data is also being extracted from other public repositories such as Adirondack Park Agency maps for cell sites in western New York that may serve VT as that data is updated.
The VT Dept. of Public Service is tasked with doing field work to locate central office facilities in the state and then GPS the locations for inclusion in the data. At this time, they have created an example dataset for VCGI to review and approve prior to full data collection during the summer.
Additional, public data sources are being considered for future years. VT will be in touch with other states to find out what sources have been effective for them in updating their data.

10f. Please describe the verification activities you plan to implement

The VT Broadband Mapping Team will be performing verification by survey (on-line and phone), drive testing, and a minimal amount of field verification.

10g. Have you initiated verification activities? ◉ Yes ◯ No

10h. If yes, please describe the status of your activities

The VT Broadband Mapping Team has been working on the following verification activities;

Verification using Survey Data

The VT Center for Rural Studies (CRS) conducted a short-form phone and online survey of broadband usage in Vermont in June. Respondents indicated whether they currently have broadband, the type of broadband service, the provider, and the address where they received service. CRS collected 1728 responses from residences and businesses. VCGI will be geocoding addresses included in the survey responses, and will use the resulting data to help verify Vermont's broadband coverage data.

Drive Testing and Field Verification

This quarter saw a significant increase in the drive testing and field verification activities in VT. While we have not completed and integrated the findings of this work the latest status is as follows;

WISP Field Test:

Our propagation mapping sub-contractor traveled to Vermont the week of June 21 to spot check WISP signal levels versus propagation predictions on a small test sample of sites. This testing was conducted using both a spectrum analyzer and 802.11 "sniffer" tool to decode SSID/MAC information. The contractor is still reviewing this data.

Cellular Drive Test Data Processing:

 Data extraction/processing. Our drive testing sub-contractor has nearly completed their efforts to extract and organize the data collected during the cellular drive test. This has been an involved process due to the different information available from the different phones. To complicate matters, the format/location of the information changes depending on the state of the phone (network type, voice call, data call or idle). They collected good data in the following areas:

- Voice call success/fail
- Data call success/fail and high level data transfer summary
- Uplink data speeds
- Downlink data speeds

(More verification information is available, but the space available in the form did not allow inclusion)

10i. If verification activities have not been initiated please provide a projected time line for beginning and completing such activities

n/a

Staffing

10j. How many jobs have been created or retained as a result of this project?

4.32

10k. Is the project currently fully staffed? ● Yes ○ No

10l. If no, please explain how any lack of staffing may impact the project's time line and when the project will be fully staffed

n/a

10m. When fully staffed, how many full-time equivalent (FTE) jobs do you expect to create or retain as a result of this project?

n/a

10n. Staffing Table

Job Title	FTE %	Date of Hire
GIS Technician - VCGI - maintained	69	12/07/2009
Telecommunications Infrastructure Specialist-DPS - maintained	100	10/20/2009
3 partial positions maintained - Dept. Public Service	20	
2 partial positions maintained - VCGI	71	
Pericle - 1.24 jobs maintained this quarter	100	
Center for Rural Studies - jobs maintained this quarter	47	

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Sub Contracts

10o. Subcontracts Table

Name of Subcontractor	Purpose of Subcontract	RFP Issued (Y/N)	Contract Executed (Y/N)	Start Date	End Date	Federal Funds	In-Kind Funds
Pericle Communications	Propagation Mapping	Y	Y	01/01/2010	09/30/2010	$248,800	$0
UVM/ Center for Rural Studies	Customer survey and verification	Y	Y	10/01/2009	09/30/2010	$80,742	$0
VT Dept. of Public Service	Data collection from providers	Y	Y	09/15/2009	09/30/2014	$267,805	$0
Applied Geographics	BroadbandVT.org Website Development	Y	Y	06/15/2010	12/30/2012	$89,540	$0
TBD	Broadband VT Marketing Support	Y	N			$0	$0

Add Row	Remove Row

Funding

10p. How much Federal funding has been expended as of the end of the last quarter? $369,585   10q. How much Remains? $827,911

10r. How much matching funds have been expended as of the end of last quarter? $299,374   10s. How much Remains? $0

10t. Budget Worksheet

Mapping Budget Element	Federal Funds Granted	Proposed In-Kind	Total Budget	Federal Funds Expended	Matching Funds Expended	Total Funds Expended
Personal Salaries	$162,372	$0	$162,372	$43,671	$0	$43,671
Personnel Fringe Benefits	$121,714	$0	$121,714	$32,736	$0	$32,736
Travel	$2,000	$0	$2,000	$0	$0	$0
Equipment	$4,000	$0	$4,000	$0	$0	$0
Materials / Supplies	$20,775	$0	$20,775	$617	$0	$617
Subcontracts Total	$659,737	$0	$659,737	$231,536	$0	$231,536
Subcontract #1	$0	$0	$248,800	$195,900	$0	$0
Subcontract #2	$0	$0	$80,742	$18,636	$0	$0
Subcontract #3	$0	$0	$267,805	$17,000	$0	$0
Subcontract #4	$0	$0	$89,540	$0	$0	$0
Subcontract #5	$0	$0	$0	$0	$0	$0
Construction	$0	$0	$0	$0	$0	$0
Other	$0	$299,374	$299,374	$0	$299,374	$299,374
Total Direct Costs	$970,598	$299,374	$1,269,972	$308,559	$299,374	$607,933
Total Indirect Costs	$226,898	$0	$226,898	$61,026	$0	$61,026
Total Costs	$1,197,496	$299,374	$1,496,870	$369,585	$299,374	$668,959
% Of Total	80	20	100	55	45	100

Hardware / Software

10u. Has the project team purchased the software / hardware described in the application? ○ Yes ● No

10v. If yes, please list

n/a

10w. Please note any software / hardware that has yet to be purchased and explain why it has not been purchased

The workstation hardware has not been purchased yet, but it will be purchased in the next quarter. The VT Broadband Mapping Team is still making decisions about our web strategy etc. and it is not yet clear as to whether we will be purchasing the software identified in our proposal. That decision will be made within the design discussions that will take place with our website development contractor.

10x. Has the project team purchased or used any data sets? ○ Yes ● No

10y. If yes, please list

n/a

10z. Are there any additional project milestones or information that has not been included? ○ Yes ● No

10aa. If yes, please list

n/a

10bb. Please describe any challenge or obstacle that you have encountered and detail the mitigation strategies the project team is employing

The challenges that the VT team faced in the Apr-June 2010 quarter were primarily related to standard data development issues such as completing NDAs, getting robust survey responses for community anchor institutions, defining a standard minimum level of data quality for Provider submissions, establishing repeatable processes and documenting them, making decisions about how the drive testing data will be integrated into the broadband coverage data and other important technical considerations. Managerial challenges were also primarily standard RFP development, review and selection issues.

In each case the VT Team is dealing with these issues through the application of standard industry practices whenever possible. In some cases communication with other states has been helpful to make decisions about treatment of data. In some cases, the situation was singular in nature and our team made the decision amongst ourselves.

10cc. Please provide any other information that you think would be useful to NTIA as it assesses your Broadband Mapping Project

As mentioned in the March Report, Provider participation has been good in Vermont. We believe that level of participation should continue. The most promising new source of information for us this quarter is the results of the drive testing effort. This will give us a very good picture of the actual extent of wireless coverage along state roads.

We have serious questions about the veracity of the claims from Satellite Service Providers that the "entire state" has access to their broadband service. There are certainly terrain and ground cover issues that impact satellite access in VT. The question for us, that remains unanswered at this point, is how we treat satellite provider data. If we accept their claims of total coverage, the public already knows that is not true and will present credibility issues for our products. Yet we have limited capacity to verify point-of-service availability at all of the state's addresses given the site specific nature of this problem. We will be looking for guidance from other states or NTIA on this question.

11. Broadband Planning

11a. Please describe progress made against all goals, objectives, and milestones detailed in the approved Project Plan. Be sure to include a description of each major activity / milestone that you plan to complete and your current status

The VT Broadband Team did not request funding for Broadband Planning Activities

11b. Please describe any challenge or obstacle that you have encountered and detail the mitigation strategies the project team is employing

n/a

11c. Does the Project Team anticipate any changes to the project plan for Broadband Planning? ○ Yes ● No

11d. If yes, please describe these anticipated changes. Please note that NTIA will need to approve changes to the Project Plan before they can be implemented

n/a

Funding

11e. How much Federal funding has been expended as of the end of the last quarter? $0   11f. How much Remains? $0

11g. How much matching funds have been expended as of the end of last quarter? $0   11h. How much Remains? $0

11i. Planning Worksheet

Planning Budget Element	Federal Funds Granted	Proposed In-Kind	Total Budget	Federal Funds Expended	Matching Funds Expended	Total Funds Expended
Personal Salaries	$0	$0	$0	$0	$0	$0
Personnel Fringe Benefits	$0	$0	$0	$0	$0	$0
Travel	$0	$0	$0	$0	$0	$0
Equipment	$0	$0	$0	$0	$0	$0
Materials / Supplies	$0	$0	$0	$0	$0	$0
Subcontracts Total	$0	$0	$0	$0	$0	$0
Subcontract #1	$0	$0	$0	$0	$0	$0
Subcontract #2	$0	$0	$0	$0	$0	$0
Subcontract #3	$0	$0	$0	$0	$0	$0
Subcontract #4	$0	$0	$0	$0	$0	$0
Subcontract #5	$0	$0	$0	$0	$0	$0
Construction	$0	$0	$0	$0	$0	$0
Other	$0	$0	$0	$0	$0	$0
Total Direct Costs	$0	$0	$0	$0	$0	$0
Total Indirect Costs	$0	$0	$0	$0	$0	$0
Total Costs	$0	$0	$0	$0	$0	$0
% Of Total	0	0	0	0	0	0

Additional Planning Information

11j. Are there any additional project milestones or information that has not been included?

n/a

11k. Please describe any challenge or obstacle that you have encountered and detail the mitigation strategies the Project Team is employing

n/a

11l. Please provide any other information that you think would be useful to NTIA as it assesses your Broadband Mapping Project

n/a

12. Certification: I certify to the best of my knowledge and belief that this report is correct and complete for performance of activities for the purpose set forth in the award documents.		
12a. Typed or Printed Name and Title of Authorized Certifying Official David F Brotzman	12c. Telephone (area code, number, and extension) 802-882-3003	
Executive Director	12d. Email Address davidb@vcgi.org	
12b. Signature of Authorized Certifying Official Submitted Electronically	12e. Date Report Submitted (Month, Day, Year) 10-05-2010	